

Engage



Count to 20 and Workout

Introduce

Key Learning: to use bonds within 10 to identify bonds within 20

Success Criteria:

I can recall number bonds within 10

I can see a pattern between bonds within 10 and within 20

I can use my number bond knowledge to find number bonds within 20

I can record different bonds within 20

I can set my work out correctly with one digit in a square



Star Words

number bond

sum

commutative

pattern

part

whole

ten

similar

Let's
Recap

What do you notice?

$$3 + 2 = 5$$
$$13 + 2 = 15$$

$$2 + 1 = 3$$
$$2 + 11 = 13$$

We can use our bonds within 10 to help us learn our bonds within 20!

Let's
Recap

If our whole has a 10 more, we just add 10 to **one** of our parts.

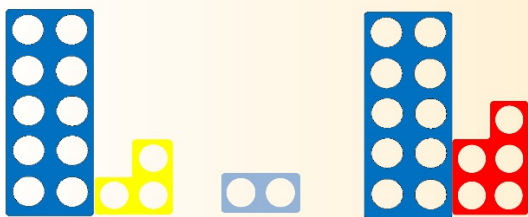
$$3 + 2 = 5$$



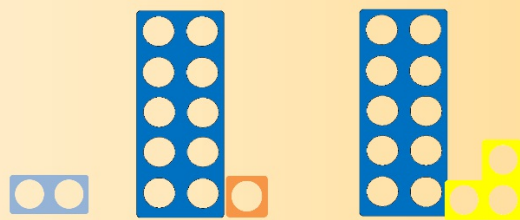
$$2 + 1 = 3$$



$$13 + 2 = 15$$



$$2 + 11 = 13$$



Now it's your turn...

Practise
and
consider

What number bond is represented in the pictures?

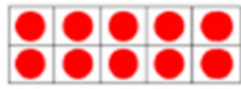


There are ___ red counters.

There are ___ blue counters.

Altogether there are ___ counters.

$$__ + __ = __ \quad __ + __ = __$$



There are ___ red counters.

There are ___ blue counters.

Altogether there are ___ counters.

$$__ + __ = __$$

$$__ + __ = __$$



Eva writes this calculation: $18 - 5 = 13$
Which of the following could she use to check her work?

$13 + 5$	$13 - 5$
$18 - 13$	$5 + 13$

Going Deeper

Which number bond within 10 could she also use to check her work?

$3 + 5 = 8,$
because then we also know that
 $8 - 5 = 3$

Now it's your turn. .

Independent
task

Use your number bond knowledge to fill in the gaps in the equations:

$3 + \underline{\quad} = 5$

$5 + \underline{\quad} = 6$

$13 + \underline{\quad} = 15$

$5 + \underline{\quad} = 16$

$1 + \underline{\quad} = 9$

$4 + \underline{\quad} = 8$



$1 + \underline{\quad} = 19$

$14 + \underline{\quad} = 18$

draw tens and ones

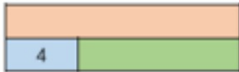

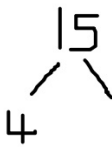
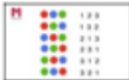


Deepening

True / False
 

If $4 + 0$, $0 + 4$, $1 + 3$, $3 + 1$ and $2 + 2$ are number bonds to 4, then the only number bonds to 14 must be:
 $14 + 0$, $0 + 14$, $11 + 3$, $13 + 1$, $12 + 2$ and $2 + 12$.


Here is an incomplete bar model.
 The total is greater than 10 but less than 20.
 What could the missing numbers be?
 How many different combinations can you find?








12.10.2021 Deepening
 Key Learning: to apply bonds within 10 to find bonds within 20

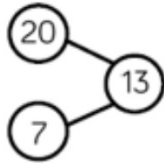
What is the same?
 What is different?

$7 + 3 = 10$
 $17 + 3 = 20$
 $20 = 7 + 13$



What's the same?

What's different?

 Jack represents a number bond to 20 in the part whole model.



Can you spot his mistake?
 Correct the mistake in green pen.

